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AN ORDINARY STRABISMUS OPERATION, FOLLOWED BY TENDINITIS—PERFORATION OF THE SCLEROTIC—DETACHMENT OF THE RETINA—RECOVERY.

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ACCIDENTS following the operation for squint are fortunately very rare. It becomes all the more important, for this reason, to report those which do occur. The succession of events which took place in the case which I am now about to report, are of such unusual interest as to seem well worth putting on record.

On the 27th of Nov., 1874, I operated upon the left eye of Mary L., æt. 27, for an ordinary strabismus convergens concomitans of about $3\frac{1}{2}'''$ in the St. John's Riverside Hospital at Yonkers. The operation, which was entirely sub-conjunctival, was accomplished without the least mishap in four or five strokes of the scissors. The next morning there was no unusual reaction. It was only after the operation was performed that I learned that the patient had had intermittent fever, most of the time for three years, and that she was under treatment for this affection in the hospital at the time when I operated. She was very pale and debilitated, and had the appearance of a person who had suffered for some time from an exhausting disease.

My brother, under whose care I left the patient, says that inflammation began the next day. He kept her in bed and made cold applications, but the swelling of the lids, protrusion of the eye, and chemosis became so great that he grew alarmed, and sent her down to the city to see me.

Dec. 2d.—There was then marked exophthalmus, impediment in the motions of the globe, great swelling of the lids, and serous chemosis overlapping the cornea.

I sent her back with the directions to apply warm applications, and to return to my office in a few days, which she did on the 7th of Dec. I was now very much alarmed at the condition of the eye, and feared that sloughing of the cornea would soon ensue. The same day she was admitted to the N. Y. Ophthalmic and Aural Institute. The condition of the eye as then recorded, is as follows: There is great swelling of the eye-

lids, which are so tense as to render them almost immovable; the globe is protruded between the lids; the ocular conjunctiva, swollen and chemotic, overlapping the cornea to such an extent that only the pupil can be seen. The cornea was still transparent; iris acts well, and the interior of the eye is normal. Movements impeded in all directions.

The patient suffers great pain, and there is some constitutional disturbance.

Dec. 8th.—Swelling and chemosis have increased, being greatest over the insertion of the divided tendon. Several incisions were made in the chemotic conjunctiva, with the scissors, only a little blood escaping.

Dec. 11th.—Chemosis has increased still more, and there is a distinct protrusion over the muscle.

Dec. 12th.—The protrusion was so great that I suspected there was pus under the conjunctiva, and determined to snip the conjunctiva; in so doing a small quantity of thin pus escaped, which was immediately followed by a gush of perfectly healthy vitreous, as I had cut into the sclerotic. Immediately following this accident, the anterior chamber deepened to twice or three times its natural depth, the iris being greatly retracted. The ophthalmoscope showed striped detachment of the retina, and the vision, which had hitherto been unaffected, sank to perception of light. A pressure bandage was at once applied and strict quiet enjoined. The next day there was some pus on the lint. The wound gaped widely, and during the examination, in spite of great care, some vitreous escaped. There was no abatement in the swelling of the lids or chemosis; the cornea, however, remained clear. For fear of further loss of vitreous the eye was not examined with the ophthalmoscope; Tn, and the same condition of the anterior chamber.

Dec. 14th.—The wound of the sclerotic apparently closed, but the whole region bulges and has the appearance of a forming abscess. Anterior chamber not quite so deep, tension less diminished. The patient has excessive sweating, which was supposed to be a relic of intermittent fever, for which sulphate of quinine with an excess of aromatic sulphuric acid was ordered.

Dec. 16th.—On removing the bandage the patient pressed the lids together forcibly, and another escape of vitreous took place; the bandage was at once reapplied.

Dec. 17th.—Had severe pain last night; lids not more swollen; bandage applied without opening the eye. For the next ten days the bandage was only removed to clean the lids, and at once readjusted, without making an examination of the eye. The swelling of the lids became daily less and the tension improved.

Dec. 29th.—Examined the eye. The wound of the sclerotic was firmly closed, with granulations over the scar; anterior chamber had regained its normal depth; the chemosis had almost gone, and the movements of the eye were restored. Tn, no divergence; counts fingers at 2′. F. entirely wanting upward and outward. OS. examination shows opacities in the vitreous and detachment of the retina downward and inward. The next note of the patient's condition was made the day she was discharged from the Institution, Jan. 6th, 1875.

There was from $\frac{1}{4}$–$\frac{1}{2}$‴ of dynamic convergence under the covering hand, and fingers were seen at 10′; no longer any limitation of F., although with the ophthalmoscope, the lower and inner part of the retina was of a grayish-blue color, slightly raised, with fulness and tortuosity of the vessels as seen in incipient detachment.

About two weeks later, the patient came to my office. The granulation over the site of the wound had quite disappeared, and the caruncle was considerably sunken. The scar in the sclerotic, which is about 2‴ in length, is somewhat prominent and shows the choroid shining through. Mobility of the globe inward is greatly impaired, so that the margin of the cornea only reaches the lachrymal point. There is slight dynamic convergence under the covering hand, but none in binocular fixation. Tn, and F complete. H $\frac{1}{24}$, S $\frac{20}{200}$, Sn. $3\frac{1}{2}$, R H $\frac{1}{30}$, S = $\frac{20}{20}$. There was no longer any evidence of detachment of the retina, which was everywhere even, and the vessels no longer tortuous. There was still some opacity of the vitreous, and atrophic spots in the choroid, especially in the neighborhood of the wound. But the most remarkable appearance presented itself in that portion of the fundus which exactly corresponded to the wound of the choroid, where there was a large, crescentic, shining white patch, strikingly like an isolated rupture of the choroid in appearance. It was about 2 ds. of the od. in length, with the convexity of the crescent looking towards the disc, and surrounded by other atrophic spots and pigment heaps. The retinal vessels could be distinctly traced over it.

I examined the patient for the last time, March 4th, 1875. There was no longer any protrusion of the scar. The wound was evenly and firmly united. V had risen to $\frac{20}{70}$.

The mobility inwards was but slightly impaired and there was a tendency to divergence upon fixation. The eye was quite free from pain or annoyance of any kind.

There are several points of interest in this case, and the first one which suggests itself is, that very considerable reaction may follow even a carefully performed operation performed for strabis-

mus, which might even result in the loss of the eye. I have no doubt but that in this case the miserable condition of the patient's health had a good deal to do with the severe inflammatory process which ensued. I am quite sure that, had I known her condition, I would not have performed the operation.

The opening of the sclerotic can only be explained by the softening from maceration by the sub-conjunctival effusion, giving rise to a staphylomatous protrusion at this point, with thinning of the tissue, so that it was readily cut into when I made the opening with the scissors.

Another interesting point is the occurrence of detachment of the retina, which must have been caused by the sudden loss of vitreous, causing collapse of the globe, as shown by the great retraction of the iris. It is also worthy of notice, that complete recovery from a very considerable detachment of the retina took place, thus showing that the probability of recovery from traumatic detachment, as has also been observed by Von Graefe and others, is much more likely to occur than in cases from other causes. It appears, too, from this case that wounds which open into the vitreous chamber, are not so dangerous for the integrity of the eye as we have been in the habit of considering them, and opens the question whether we may not be more daring in resorting to them when necessary to remove foreign bodies, etc.

If the swelling of the lids and conjunctiva had not been so great, I should have resorted to the use of a suture for closure of the sclerotic wound, but it is evident that this procedure would have been quite impossible in this case. I have, however, made use of it in a case of simple lacerated wound of the sclera with very good results, (see Transactions of Am. Ophth. Soc., for 1873,) and have seen it done with the same good effect by one of my colleagues in the N. Y. Ophthalmic and Aural Institute.